SUBJECT INDEX

A

Absorption: Ti CP in NaCl sol vs Cl, (6) 266

ACCELERATED LAB TESTING
Alloy 600 U-bend SCC in 290 C hi pur H_2O, (8) 425
composition infl sensit 304 steel, (2) 51, (12) 669
pit resist of AISI 316 GTA welds, (11) 569
rapid ident IGC or IGSCC Alloy 600, (12) 640

ACETIC ACIDS
CP of Al in acids, (2) 88
pitting mild steel in basic Na_2S sol, (8) 414

Acid surface prep: Alloy 600 U-bend SCC in 290 C hi pur H_2O, (8) 425

ACIDS, AQUEOUS
crack sol analysis in SCC AA7075, (4) 195
review—Fe-oxide dissol mech, (12) 663

Acoustical nondestructive testing: Al acous emis corros, (9) 459
Activation, electrochem: wt loss eval vs activation delay, (6) 322
Adhesion: coating disbond by hi pH H_2O film, (1) 5

AERATION
steel inhib by molyb ions, (6) 296
urea hi temp, pres vs hi-Cr, low Ni steel, (8) 387

Aerobic, microorganisms: biogenic sulfide films + air vs steel, (12) 650
Alkaline water, appl inhib: Ni 270 vs P-containing sol, (10) 528
Alkaline, aqueous: Cu infl on H, corros steels vs H_2S, (9) 471

ALKALIS AND SALTS
passive film breakdown on Fe, (9) 465
pitting mild steel in basic Na_2S solu, (8) 414

ALLOYING
AISI 304 microalloy vs sensit, (8) 441, (12) 643
Al pit vs open circuit cond, (10) 534
Alloy 600 U-bend SCC in 290 C hi pur H_2O, (8) 425
amorph Fe-Ni-Cr-W alloys vs Cl^-, (6) 272
anod films on Ni, Ni-Mo in Na_2SO_4, (2) 62
anod films on single phase Ni-Mo, (12) 655
composition infl sensit 304 steel, (2) 51, (12) 669
disc-continuous cooling sensit 304 SS, (12) 669
Fe + or 1 Al, Si in 25 C H_2SO_4, (4) 190
formic acid vs Fe, Ni, Cr, 304 SS, (3) 95
metallurg aspects 304 sensit, (1) 21
microstruc of SSCC Fe tubes, (2) 77
oxida Fe-Al with Cr, Ni, or Mn, (4) 152
passivity ferritic SS in Cl^- sol, (10) 545
pipeline steels vs wet natural gas, H_2S, (9) 478
pit of zirconium - review, (1) 9
pit resist AISI 316 GTA welds, (11) 569
pit suscept low alloy turbine disk, (8) 409
Pt alloying effects on pure Cr, (3) 134
Ti alloying vs HCl acid, (1) 14
urea hi temp, pres vs hi Cr, low Ni steel, (8) 387
304 grain attack due to sand P doping, (11) 598

Alternating stray currents: AC corros of Al in HCl, (12) 644

ALUMINUM
AC corros of Al in HCl, (12) 644
Al acous emis corros, (9) 459
Al pit vs open circuit cond, (10) 534
CP of Al in acids, (2) 88
Fe + or 1 Al, Si in 25 C H_2SO_4, (4) 190
oxidation Fe-Al with Cr, Ni, or Mn, (4) 152
pit induction time significance, (10) 559
recurrent H_2O condens effects, (10) 511

Aluminum, wrought, 2000: CP of Al in acids, (2) 88
Aluminum, wrought, 3000: CP of Al in acids, (2) 88
Aluminum, wrought, 6000: recurrent H_2O condens effects, (10) 511

ALUMINUM, WROUGHT, 7000
Al-Zn-Mg suscep to SCC by SSR, (10) 552
crack sol analysis in SCC of AA7075, (4) 195

Ammonia: urea hi temp, pres vs hi Cr, low Ni steel, (8) 387
Ammonium hydroxide: coating disbond by hi pH H_2O film, (1) 5
Anaerobic microorganisms: biogenic sulfide films + air vs steel, (12) 650

ANODIC ELECTRODE PHENOMENA
AC corros of Al in HCl, (12) 644
anod films on single phase Ni-Mo, (12) 655
anod polar Ni-Fe, Ni-Cr-Fe + P, B, (11) 619
crack growth, SCC of aust SS, (9) 487
galvanic rate, distrib predict, (12) 628
Fe + or 1 Al, Si in 25 C H_2SO_4, (4) 190
Ni 270 vs P-containing sol, (10) 528
passivity Fe in NaOH, Na_2SiO_3 sol, (11) 595
pit of Cr steels in H_2SO_4, Cl^-, (4) 140
Pt alloy effects on pure Cr, (3) 134
repass kinetics, scratches on Fe, (3) 110
SCC aust SS vs compres stress, (6) 302
SCC brass in ammonia, no anod attack, (8) 439

ANODIC PROTECTION
anod polar Ni-Fe, Ni-Cr-Fe + P, B, (11) 619
CP of Zr in oxidiz HCl sol, (6) 289

Anodized conversion coatings: anod films on Ni, Ni-Mo in Na_2SO_4, (2) 62
Aqueous boilers: C steel vs Cl^-, fluorides, (4) 186

AQUEOUS CHEMICAL
amorph Fe-Ni-Cr-W alloys vs Cl^-, (6) 272
SCC brass in ammonia, no anod attack, (8) 439
Ti cathod polar in NaCl sol vs Cl^-, (6) 266

AQUEOUS ENVIRONMENTS
Al-Zn-Mg suscep to SCC by SSR, (10) 552
Cu vs H_2O+LiCl at 4 pH potential tests, (8) 420
flow veloc infl on CP cylinder, (3) 127
pit of zirconium - review, (1) 9
pit Zr4 in methanol sol with Cl^-, (10) 561
repassivation kinetics, scratches on Fe, (3) 110

Area effect, galvanic cells: crevice attack AISI 304, 316 in seaw, (6) 313
ASTM Standards: elec charge test for 304 sensit, (11) 584

Atomic effects: calcareous deposits due to CP, (11) 609

AUTOCLAVE TESTING
C steel vs Cl^-, fluorides, (4) 186
flow veloc vs SCC 304 in Na_2SO_4, (9) 474
magnetite dissol in chelants, (4) 176

Auto transportation: auto body rust layer character, (11) 606

B

Bactericides, biostats, fungicides: SCC AISI 302 in SSRT, (9) 493
Benzotriazoles, acid inhib: inhib H_2SO_4 attack, 63-37 brass, (1) 33

BIBLIOGRAPHIES
biography Aaron Wachter, (6) 263, (8) 408
biography I. Epelboin, (3) 93
pit of zirconium - review, (1) 9

BIOGRAPHIES
Aaron Wachter, (6) 263, (8) 408
I. Epelboin, (3) 93

Biological: biogenic sulfide films + air vs steel, (12) 650
Boilers: magnetite dissol in chelants, (4) 176

BORIC ACID
P ion implant effect C steel, (6) 307
passive film breakdown on Fe, (9) 465

Boron: AISI 304 microalloy vs sensit, (8) 441, (12) 643

Brass: SCC brass in ammonia, no anod attack, (8) 439

C

Calcium: flow veloc infl on CP cylinder, (3) 127
Calcium carbonate: calcareous deposits due to CP, (11) 609

CALCULATIONS
CP inside pipe related to time, (11) 604
crevice attack AISI 304, 316 in seaw, (6) 313, (7) 343
Cu vs Cl^-, infl oxygen, (2) 82
local effects finite elem model, (10) 540
recurrent H_2O condens effects, (10) 511
relative humid infl vs hi str C steel, (10) 507
review—Fe oxide dissol mech, (12) 663

CARBIDES
AISI 304 microalloy vs sensit, (8) 441, (12) 643
compos infl sensit 304 steel, (2) 51, (12) 669
cutting, grinding infl 304 sensit, (9) 445
disc- cont cooling sensit of 304 SS, (12) 669
etch test for ferritic steels ig at a, (4) 163
In 600 heat treat vs low temp SCC, (6) 281
potentiodynam test 304 sensit, (8) 393, (10) 560
SCC AISI 302 in SSRT, (9) 493
304 grain attack due to sand P doping, (11) 598

CARBON
Alloy 600 U-bend SCC in 290 C hi pur H_2O, (8) 425
composit infl sensit 304 steel, (2) 51, (12) 669
disc- cont cooling sensit 304 SS, (12) 669
metallurg aspects 304 sensit, (1) 21

304 grain attack due to sand P doping, (11) 598

CARBON DIOXIDE
calcareous deposits due to CP, (11) 609
urea hi temp, pres vs Hi-Cr, low Ni steel, (8) 387

CARBON STEEL
abrasion steel in 1% NaCl, (2) 60
auto body rust layer character, (11) 606
C steel vs Cl^-, fluorides, (4) 186
CP inside pipe related to time, (11) 604
P ion implant effects C steel, (6) 307
passivity of Fe in NaOH, Na_2SiO_3 sol, (11) 595
pit mild steel in basic Na_2S sol, (8) 414
review- Fe oxide dissol mechanism, (12) 663
steel inhib by molyb ions, (6) 296
tropic atmosph vs C steel, (4) 170

Carbonate bases, salts: calcar deposits due to CP, (11) 609
Catalogs: Al pit vs open circuit cond, (10) 534

CATHODIC CHARGING
anod films on single phase Ni-Mo, (12) 655
duplex Cr-Ni steels vs H_2S-Cl 177 C sol, (8) 431

CATHODIC ELECTRODE PHENOMENA
CP Al in acids, (2) 88
coating disbond by hi pH H_2O film, (1) 5
galvanic rate, distrib predict, (12) 628
pit Fe infl by Mo, Cr, W salts, (2) 47
Pt alloy effects on pure Cr, (3) 134
Ti cathod polar in NaCl sol vs Cl^-, (6) 266

CATHODIC PROTECTION
abrasion steel in 1% NaCl, (2) 60
calcar deposits due to CP, (11) 609
CP inside pipe related to time, (11) 604
CP of Zr in oxidiz HCl sol, (6) 289
CP protect Al in acids, (2) 88
disc-galvanostat polar resist measure, (11) 593
flow veloc infl on CP cylinder, (3) 127

Cells: local effects finite elem model, (10) 540
Chelation: magnetite dissol in chelants, (4) 176

CHEMICAL/ELECTROCHEMICAL, LAB TEST
AC corros Al in HCl, (12) 644
anod films on Ni, Ni-Mo in Na_2SO_4, (2) 62
anod films on single phase Ni-Mo, (12) 655
auto body rust layer character, (11) 606
cutting, grinding infl 304 sensit, (9) 445
elec charge test for 304 sensit, (11) 584
formic acid vs Fe, Ni, Cr, 304 SS, (3) 95
H_2SO_4, O_2, H, 289 C H_2O SCC AISI 304, (10) 518
pit of zirconium - review, (1) 9
potentials vs fatigue 304 vs 250 C, Na_2SO_4, (11) 573
relative humid infl vs hi str C steel, (10) 507
Ti alloy vs HCl, (1) 14
Xe implant infl on Re-Cr crevice, (10) 550

Chlorates: crack sol analys in SCC AA7075, (4) 195
Chloric acid: CP of Al in acids, (2) 88

CHLORIDES, BASES AND SALTS
abrasion steel in 1% NaCl, (2) 60
Al-Zn-Mg suscep to SCC by SSR, (10) 552
amorph Fe-Ni-Cr-W alloys vs Cl^-, (6) 272
auto body rust layer character, (11) 606
C steel vs Cl^- fluorides, (4) 186
Cl^- infl on oxide films on Nb, (3) 116
chlorine dioxide vs 316L SS, (1) 1
Cu vs Cl^-, infl oxygen, (2) 82
Cu vs H_2O+LiCl at 4 pH potential tests, (8) 420
etch test for ferritic steels ig at a, (4) 163
Mo segregat in Ni-NC alloy pit, (3) 105
Ni-Co-Cr-Mo amorph alloy vs H_2SO_4, (2) 73
pit of Cr steels in H_2SO_4, Cl^-, (4) 140
pit of Fe infl by Mo, Cr, W salts, (2) 47
pit of zirconium - review, (1) 9
recurrent H_2O condens effects, (10) 511
thiosulfate attack on aust SS, (12) 633
tropic atmosph vs C steel, (4) 170

CHLORINE
auto body rust layer character, (11) 606
Cu infl on H, corros steels vs H_2S, (9) 471
Ti cathod polar in NaCl sol vs Cl, (6) 266

Chlorine dioxide: chlorine dioxide vs 316L SS, (1) 1
Chromate conversion coatings: recurrent H_2O condens effects, (10) 511
Chromates: crystallog of pure Mg SCC, (1) 39

CHROMIUM
AISI 304 microalloy vs sensit, (8) 441, (12) 643
amorph Fe-Ni-Cr-W alloys vs Cl^-, (6) 272
cutting, grinding infl 304 sensit, (9) 445
formic acid vs Fe, Ni, Cr, and 304 SS, (3) 95
Ni-Co-Cr-Mo amorph alloy vs H_2SO_4, (2) 73
oxidation Fe-Al with Cr, Ni, or Mn, (4) 152
passivity of ferritic SS in Cl^- sol, (10) 545
pit of Fe infl by Mo, Cr, W salts, (2) 47
Pt alloy effects on pure Cr, (3) 134
SCC of AISI 302 in SSRT, (9) 493

Chromium molybdenum alloys: H induced crack of smooth torsional, (4) 197
Cleaning: magnetite dissol in chelants, (4) 176

COBALT
Co, Ni vs H_2SO_4 + propargyl alcohol, (8) 418
Ni-Co-Cr-Mo amorph alloy vs H_2SO_4, (2) 73

COLD FABRICATION
Alloy 600 U-bend SCC in 290 C hi pur H_2O, (8) 425
H embrit of PH steels, infl surf condit, (4) 146

COLD WORK
cutting, grinding infl 304 sensit, (9) 445
Xe implant infl on Re-Cr crevice, (10) 550

COLUMBIUM
AISI 304 microalloy vs sensit, (8) 441, (12) 643
Cl^- infl on oxide films on Nb, (3) 116

Compacted multiphase or mixtures: Fe + or 1 Al, Si in 25 C H_2SO_4, (4) 190

COMPRESSIVE STRESSES
crack growth, SCC of aust SS, (9) 487
pit suscep low alloy turbine disk, (8) 409
SCC of aust SS vs compres stress, (6) 302

Computer calculations: local effects finite elem model, (10) 540

CONCENTRATION CELLS
biogenic sulfide films + air vs steel, (12) 650
crevice attack on AISI 304, 316 in seaw, (6) 313, (7) 343
recurrent H_2O condens effects, (10) 511

CONCENTRATION OF CHEMICALS
AC corros of Al in HCl, (12) 644
Cl^- infl on oxide films on Nb, (3) 116
crevice attack on AISI 304, 316 in seaw, (6) 313, (7) 343
Cu infl on H, corros of steels vs H_2S, (9) 471
formic acid vs Fe, Ni, Cr, and 304 SS, (3) 95
local effects finite elem model, (10) 540
recurrent H_2O condens effects, (10) 511

Condensation: recurrent H_2O condens effects, (10) 511
Conductivity, electrical, galvanic rate, distrib predict, (12) 628
Contamination, environmental effects: recurrent H_2O condens effects, (10) 511
Cooling, prevention and control: composit infl sensit 304 steel, (2) 51, (12) 669

COPPER
C steel vs Cl^-, fluorides, (4) 186
CP inside pipe related to time, (11) 604
Cu infl on H, corros of steels vs H_2S, (9) 471
Cu vs Cl^- infl of oxygen, (2) 82
Cu vs H_2O+LiCl at 4 pH potential tests, (8) 420

Copper sulfate: SSRT techniques vs brass, (3) 101
Copper, cast, 801-803 CDA: SCC brass in ammonia, no anod attack, (8) 439
Copper, cast, 872-879 CDA + Cu, Zn, Si, SCC brass in ammonia, no anod attack, (8) 439
Copper, wrought, 205-298 CDA gilding: inhib H_2SO_4 attack, 63-37 brass, (1) 33
Copper, wrought, 443-445 CDA, admiralty: SSRT techniques vs brass, (3) 101
Corrosion erosion: abrasion steel in 1% NaCl, (2) 60

CORROSION PRODUCTS
Al pit vs open circuit condit, (10) 534
auto body rust layer character, (11) 606
crack optic anal during strain tests, (3) 120, (5) 219, (7) 343
flow veloc infl on CP cylinder, (3) 127
Ni 270 vs P-containing sol, (10) 528
passive film breakdown on Fe, (9) 465
passivity ferritic SS in Cl^- sol, (10) 545
pit Zr4 in methanol sol with Cl^-, (10) 561
relative humid infl vs hi str, C steel, (10) 507
repass kinetics, scratches on Fe, (3) 110
review- Fe oxide dissol mechanism, (12) 663
Ti alloy vs HCl acid, (1) 14

Coulometric c .el lab test: elec charge test for 304 sensit, (11) 584

CRACKING, LOCAL
Al-Zn-Mg suscep to SCC by SSR, (10) 552
Alloy 600 U-bend SCC in 290 C hi pur H_2O, (8) 425
auto body rust layer character, (11) 606
crack growth, SCC of aust SS, (9) 487
crack optic anal during strain tests, (3) 120, (5) 219, (7) 343
crack sol analys in SCC of AA7075, (4) 195
crystallog of pure Mg SCC, (1) 39
Cu infl on H, corros steels vs H_2S, (9) 471
disc-veloc effects SCC C, 304 SS, (1) 36
H induced crack of smooth torsional, (4) 197
pipeline steels vs wet natural gas, H_2S, (9) 478
pit suscep low alloy turbine disk, (8) 409
potential vs fatigue 304 vs 250 C, Na_2SO_4, (11) 573
SCC aust SS vs compres stress, (6) 302

CREVICES
Al acous emis corros, (9) 459
C steel vs Cl^-, fluorides, (4) 186
chlorine dioxide vs 316L SS, (1) 1
crack sol analys SCC of AA7075, (4) 195

crevice attack on AISI 304, 316, in seaw, (6) 313, (7) 343
Ni-Co-Cr-Mo amorph alloy vs H_2SO_4, (2) 73
thiosulfate attack on aust SS, (12) 633
Xe implant infl on Re-Cr crevice, (10) 550

CURRENT, DENSITY, ON-SITE TEST
anod polar Ni-Fe, Ni-Cr-Fe + P, B, (11) 619
calcar deposits due to CP, (11) 609
CP of Al in acids, (2) 88
flow veloc infl on CP cylinder, (3) 127
galvanic rate, distrib predict, (12) 628
local effects finite elem model, (10) 540

CYCLIC LIQUID IMMERSION
calcar deposits due to CP, (11) 609
Cu vs Cl^-, infl of oxygen, (2) 82

Cyclic phenomena: recurrent H_2O condens effects, (10) 511
Cyclic stresses: potentials vs fatigue 304 vs 250 C Na_2SO_4, (11) 573
Cycling, lab test: AC corros of Al in HCl, (12) 644

D

DATA CORRELATION, CALCULATIONS
elec charge test for 304 sensit, (11) 584
galvanic rate, distrib predict, (12) 628

DEAERATION
galvanic rate, distrib predict, (12) 628
Ni-Co-Cr-Mo amorph alloy vs H_2SO_4, (2) 73
P ion implant effects on C steel, (6) 307
steel inhib by molyb ions, (6) 296

Dealloying: inhib of H_2SO_4 attack, 63-37 brass, (1) 33
Destructive testing: potentiodyn test for 304 sensit, (8) 393, (10) 560
Diffusion: galvanic rate, distrib predict, (12) 628
Digital recording: Al acous emis corros, (9) 459
Disbonding, coatings: coating disbond by hi pH H_2O film, (1) 5

DISCUSSIONS
contin cooling sensit 304 SS, (12) 669
galvanostat polar resist measure, (11) 593
SSC low alloy steel pipes, (10) 517
veloc effects SCC C, 304 SS, (1) 36

DISLOCATIONS
H embrit of PH steels, infl surf cond, (4) 146
Xe implant infl on Re-Cr crevice, (10) 550

DISSOLUTION
magnetite dissol in chelants, (4) 176
passive film breakdown on Fe, (9) 465
review- Fe oxide dissol mech, (12) 663

Drainage: abrasion steel in 1% NaCl, (2) 60
Drinking water: steel inhib by molyb ions, (6) 296

DUCTS OR PIPES
Cu infl on H, corros of steels vs H_2S, (9) 471
disc-SSC low alloy steel pipes, (2) 77, (10) 517
flow veloc infl on CP cylinder, (3) 127
Ni 270 vs P-containing sol, (10) 528

DUPLEX STAINLESS STEELS
anod polar Ni-Fe, Ni-Cr-Fe + P, B, (11) 619
Cr-Ni vs H_2S-Cl 177 C sol, (8) 431
urea hi temp, pres vs hi Cr, low Ni steel, (8) 387

DYES
CP of Al in acids, (2) 88
inhib of H_2SO_4 attack, 63-37 brass, (1) 33

E

EDGE EFFECTS
crack sol analys in SCC of AA7075, (4) 195
crevice attack AISI 304, 316 in seaw, (6) 313, (7) 343
galvanic rate, distrib predict, (12) 628
pit Zr4 in methanol sol with Cl^-, (10) 561

Electrical resistance corrosion rate meters: disc-galvanostat polar resist measure, (11) 593
Electrochemical: review- Fe oxide dissol mech, (12) 663
Electrochemical surface prep: P ion implant effects C steel, (6) 307
Electrode phenomena: Cu vs Cl^- - infl, oxygen, (2) 82

ELECTRON MICROSCOPE, TESTING
Al acous emis corros, (9) 459
anod films on Ni, Ni-Mo in Na_2SO_4, (2) 62
anod films on single phase Ni-Mo, (12) 655
anod polar Ni-Fe, Ni-Cr-Fe + P, B, (11) 619
crack optic anal during strain tests, (3) 120, (5) 219, (7) 343
crack sol analys SCC AA7075, (4) 195
cutting, grinding infl 304 sensit, (9) 445
H_2SO_4, O_2, H, 289 C H_2O SCC AISI 304, (10) 518
microstr SSCC Fe tubes, (2) 77, (10) 517
Mo segreg Ni-NC alloy pit, (3) 105
oxidat Fe-Al with Cr, Ni, or Mn, (4) 152
P ion implant effects C steel, (6) 307
passivity ferrit SS in Cl^- sol, (10) 545
pit suscep low alloy turbine disk, (8) 409
potentials vs fatigue 304 vs 250 C, Na_2SO_4, (11) 573
steel inhib molyb ions, (6) 296
thiosulfate attack on aust SS, (12) 633

Electronic instruments: recurrent H_2O condens effects, (10) 511

ELLIPSOMETRIC, OPTICAL INSTRUMENT TESTING
anod polar Ni-Fe, Ni-Cr-Fe + P, B, (11) 619
passivity Fe in NaOH, Na_2SiO_3 sol, (11) 595

ENVIRONMENTS
recurrent H_2O condens effects, (10) 511
relative humid infl vs hi str, C steel, (10) 507

ERRATA
biography A. Wachter, (8) 408
crack optic anal during strain tests, (5) 219, (7) 343
crevice attack AISI 304, 316 in seaw, (7) 343
potentiodynam test 304 sensit, (10) 560

Etching: etch test ferritic steels ig at a, (4) 163
Ethylene glycol: Al acous emis corros, (9) 459

F

FABRICATION
H embrit PH steels, infl surf cond, (4) 146
Fe + or 1 Al, Si, in 25 C H_2SO_4, (4) 190

Fatigue, lab test: potentials vs fatigue 304 vs 250 C Na_2SO_4, (11) 573

FERRIC CHLORIDE
C steel vs Cl^- fluorides, (4) 186
CP Zr in oxidiz HCl sol, (6) 289

Ferric sulfate test: 600 heat treat vs low temp SCC, (6) 281

FILMING
AC corros Al in HCl, (12) 644
anod films Ni, Ni-Mo in Na_2SO_4, (2) 62
anod films single phase Ni-Mo, (12) 655
anod polar Ni-Fe, Ni-Cr-Fe + P, B, (11) 619
auto body rust layer character, (11) 606
biogenic sulfide films + air vs steel, (12) 650
calcar depos due to CP, (11) 609
C steel vs Cl^-, fluorides, (4) 186
crevice attack AISI 304, 316 in seaw, (6) 313, (7) 343
Cu infl H, corros steels vs H_2S, (9) 471
Cu vs H_2O+LiCl at 4 pH potential tests, (8) 420
flow veloc infl on CP cylinder, (3) 127
magnetite dissol in chelants, (4) 176
Ni 270 vs P-containing sol, (10) 528
oxidation Fe-Al with Cr, Ni, or Mn, (4) 152
P ion implant effects on C steel, (6) 307
passive film breakdown on Fe, (9) 465
passivity ferritic SS in Cl^- sol, (10) 545
passivity Fe in NaOH, Na_2SiO_3 sol, (11) 595
pit mild steel in basic Na_2S sol, (8) 414
pit Zr4 in methanol sol with Cl^-, (10) 561
repassiv kinetics, scratches on Fe, (3) 110
steel inhib molyb ions, (6) 296
thiosulfate attack aust SS, (12) 633

Fluorides: C steel vs Cl^-, fluorides, (4) 186
Formic acids: formic acid vs Fe, Ni, Cr, 304 SS, (3) 95
Fouling: magnetite dissol in chelants, (4) 176

FRACTOGRAPHIC TESTS
Al-Zn-Mg suscep SCC by SSR, (10) 552
crack growth, SCC of aust SS, (9) 487
crack optic anal during strain tests, (3) 120, (5) 219, (7) 343
crystallog pure Mg SCC, (1) 39
pit Zr4 in methanol sol with Cl^-, (10) 561
potentials vs fatigue 304 vs 250 C Na_2SO_4, (11) 573
SCC AISI 302 SSRT, (9) 493
SCC aust SS vs compres stress, (6) 302

FRACTURE
Al-Zn-Mg suscep SCC by SSR, (10) 552
SCC AISI 302 in SSRT, (9) 493

Fumes: CP Zr in oxidiz HCl sol, (6) 289

FUNDAMENTALS
AC corros Al in HCl, (12) 644
anod polar Ni-Fe, Ni-Cr-Fe + P, B, (11) 619
crack growth, SCC aust SS, (9) 487
passive film breakdown on Fe, (9) 465
Pt alloy effects pure Cr, (3) 134
review- Fe oxide dissol mech, (12) 663

G

Galvanic cells: galvanic rate, distrib predict, (12) 628
Galvanostats: disc-galvanostat polar resist measure, (11) 593
Gases or vapors, lab test: Xe implant infl on Re-Cr crevice, (10) 550
General corrosion: Al acous emis corros, (9) 459

GEOMETRIC EFFECTS
Al pit vs open circuit cond, (10) 534
auto body rust layer character, (11) 606
galvanic rate, distrib predict, (12) 628
pit Zr4 in meth sol with Cl^-, (10) 561

Geometry: crevice attack AISI 304, 316 in seaw, (6) 313, (7) 343

GEOMETRY, PITTING
pit mild steel in basic Na_2S sol, (8) 414
pit suscep low alloy turbine disk, (8) 409

GRAIN, MATERIALS
AISI 304 microalloy vs sensit, (8) 441, (12) 643
anod films on Ni, Ni-Mo in Na_2SO_4, (2) 62
compos infl sensit 304 steel, (2) 51, (12) 669
Cu infl H, corros steels vs H_2S, (9) 471
cutting, grinding infl 304 sensit, (9) 445
disc-contin cooling sensit 304 SS, (12) 669
elec charge test 304 sensit, (11) 584
H_2SO_4, O_2, H, 289 C H_2O SCC AISI 304, (10) 518
In 600 heat treat vs low temp SCC, (6) 281
metallurg aspects 304 sensit, (1) 21
potentiodyn test 304 sensit, (8) 393, (10) 560
SCC AISI 302 in SSRT, (9) 493
304 grain attack due to sand P doping, (11) 598

Graphic, data, lab test: AISI 304 microalloy vs sensit, (8) 441, (12) 643
Grinding: cutting, grinding infl 304 sensit, (9) 445

H

HARDNESS
microstructure sulfide SCC Fe tubes, (2) 77, (10) 517
pipeline steels vs wet natural gas, H_2S, (9) 478

HEAT AFFECTED ZONE
disc-contin cooling sensit 304 SS, (12) 669
metallurg aspects 304 sensit, (1) 21
pit resist AISI 316 GTA welds, (11) 569
SCC AISI 302 in SSRT, (9) 493

HEAT EXCHANGERS
metallurg aspects 304 sensit, (1) 21
Ni 270 vs P-containing sol, (10) 528

Heat treatment: disc-veloc effects SCC C, 304 SS, (1) 36

HEATING EFFECTS
AISI 304 microalloy vs sensit, (8) 441, (12) 643
amorph, Fe-Ni-Cr-W alloys vs Cl^-, (6) 272
cutting, grinding infl 304 sensit, (9) 445

HEATING, PREVENTION, CONTROL
Al-Zn-Mg suscep SCC by SSR, (10) 552
amorph Fe-Ni-Cr-W alloys vs Cl^-, (6) 272
disc-contin cooling sensit 304 SS, (12) 669
duplex Cr-Ni steels vs H_2S-Cl 177 C sol, (8) 431
etch test for ferritic steels ig at a, (4) 163
H embrit PH steels, infl surf cond, (4) 146
In 600 heat treat vs low temp SCC, (6) 281
metallurg aspects of 304 sensit, (1) 21
microstruc SSCC Fe tubes, (2) 77, (10) 517
potentials vs fatigue 304 vs 250 C Na_2SO_4, (11) 573
SCC AISI 302 in SSRT, (9) 493
Xe implant infl on Re-Cr crevice, (10) 550
304 grain attack due to sand P doping, (11) 598

HIGH PURITY AQUEOUS ENVIRONMENTS
Alloy 600 U-bend SCC in 290 C hi pur H_2O, (8) 425
crack optic anal during strain tests, (3) 120, (5) 219, (7) 343
H_2SO_4, O_2, H, 289 C H_2O SCC AISI 304, (10) 518
recurrent H_2O condens effects, (10) 511

HIGH TEMPERATURES
crack growth, SCC aust stainless, (9) 487
H_2SO_4, O_2, H, 289 C H_2O SCC AISI 304, (10) 518
metallurg aspects 304 sensit, (1) 21
oxida Fe-Al with Cr, Ni, or Mn, (4) 152

Humid atmosphere: relative humid infl vs hi str, C steel, (10) 507

HYDROCHLORIC ACID
AC corros Al in HCl, (12) 644
C steel vs Cl^-, fluorides, (4) 186
CP Zr in oxidiz HCl sol, (6) 289
CP Al in acids, (2) 88
Cl^- infl oxide films on Nb, (3) 116
Cu vs Cl^-, infl oxygen, (2) 82
pit zirconium - review, (1) 9
pit Zr4 in meth sol with Cl , (10) 561
Ti alloy vs HCl, (1) 14

Hydrofluoric acids: C steel vs Cl^-, fluorides, (4), 186

HYDROGEN EMBRITTLEMENT
C steel vs Cl^-, fluorides, (4) 186
CP Zr in oxidiz HCl sol, (6) 289
crack growth, SCC aust SS, (9) 487
H embrit PH steels, infl surf cond, (4) 146
microstruc sulfide SCC Fe tubes, (2) 77, (10) 517
pipeline steels vs wet natural gas, H_2S, (9) 478
SCC aust SS vs compres stress, (6) 302
Ti CP in NaCl sol vs Cl^-, (6) 266

Hydrogen peroxide: chlorine dioxide vs 316L, (1) 1

HYDROGEN, ATOMIC
crack growth, SCC aust SS, (9) 487
crack sol analys in SCC AA7075, (4) 195
Cu infl on H, corros steels vs H_2S, (9) 471
H induced cracking of smooth torsional, (4) 197
Ti CP in NaCl sol vs Cl, (6) 266

HYDROGEN, CAUSES
AC corros Al in HCl, (12) 644
Al acous emis corros, (9) 459
Al pit vs open circuit cond, (10) 534
Alloy 600 U-bend SCC in 290 C hi pur H_2O, (8) 425
H_2SO_4, O_2, H, 289 C H_2O SCC AISI 304, (10) 518

HYDROGEN SULFIDE
Cu infl on H, corros steels vs H_2S, (9) 471
disc-SSC low alloy steel pipes, (10) 517
duplex Cr-Ni steels vs H_2S-Cl 177 C sol, (8) 431
microstruct SSCC Fe tubes, (2) 77, (10) 517
pipeline steels vs wet natural gas, H_2S, (9) 478
pit mild steel in basic Na_2S sol, (8) 414

Hydrolysis: local effects finite elem model, (10) 540
Hydroxides: calcar depos due to CP, (11) 609

I, J

IMMERSION
coating disbond by hi pH H_2O film, (1) 5
duplex Cr-Ni steels vs H_2S-Cl 177 C sol, (8) 431
In 600 heat treat vs low temp SCC, (6) 281
inhib of H_2SO_4 attack 63-37 brass, (1) 33
pit suscep low alloy turbine disk, (8) 409
Ti alloy vs HCl, (1) 14
weight loss eval vs activa delay, (6) 322

Impressed current, CP: CP inside pipe related to time, (11) 604

INCLUSIONS
cutting, grinding infl 304 sensit, (9) 445
Disc-SSC low alloy steel pipes, (10) 517
microstruc SSCC Fe tubes, (2) 77, (10) 517
pipeline steels vs wet natural gas, H_2S, (9) 478
potentiodyn test for 304 sensit, (8) 393, (10) 560

INHIBITORS
biograph A. Wachter, (6) 263, (8) 408
CP Al in acids, (2) 88
Co, Ni vs H_2SO_4 + propargyl alcohol, (8) 418
inhib of H_2SO_4 attack 63-37 brass, (1) 33
pit Fe infl by Mo, Cr, W salts, (2) 47
steel inhib by molyb ions, (6) 296

INSTRUMENTATION
AISI 304 microalloy vs sensit, (8) 441, (12) 643
Al acous emis corros, (9) 459
C steel vs Cl^- fluorides, (4) 186
crack optic anal during strain tests, (3) 120, (5) 219, (7) 343
Disc-veloc effects SCC C, 304 SS, (1) 36
flow veloc infl on CP cylinder, (3) 127
galvanic rate, distrib predict, (12) 628
magnetite dissol in chelants, (4) 176
potentials vs fatigue 304 vs 250 C Na_2SO_4, (11) 573
rapid ID intergran or IGSCC Alloy 600, (12) 640
relative humid infl vs hi str, C steel, (10) 507
SSRT vs brass, (3) 101

INTERFACE, CAUSES
AC corros Al in HCl, (12) 644
amorph Fe-Ni-Cr-W alloys vs Cl^-, (6) 272
anod films on Ni, Ni-Mo in Na_2SO_4, (2) 62
calcar depos due to CP, (11) 609
Cl^- infl on oxide films on Nb, (3) 116
coating disbond by hi pH H_2O film, (1) 5
cutting, grinding infl 304 sensit, (9) 445
H embrit PH steels, infl surf cond, (4) 146
H induced cracking smooth torsional, (4) 197
pit Fe infl by Mo, Cr, W salts, (2) 47
pit suscep low alloy turbine disk, (8) 409
potentiodyn test for 304 sensit, (8) 393, (10) 560
relative humid infl vs hi str, C steel, (10) 507
review- Fe oxide dissol mech, (12) 663
SCC AISI 302 in SSRT, (9) 493
SCC SS vs compres stress, (6) 302
Ti cathod polar in NaCl sol vs Cl^-, (6) 266

INTERFACE EFFECTS
anod films on single phase Ni-Mo, (12) 655
anod polar Ni-Fe, Ni-Cr-Fe + P, B, (11) 619
biogenic sulfide films + air vs steel, (12) 650
Disc-veloc effects SCC, C, 304 SS, (1) 36
etch test ferritic steels ig at a, (4) 163
galvanic rate, distrib predict, (12) 628
Mo segreg in Ni-Nc alloy pit, (3) 105
recurrent H_2O condens effects, (10) 511
Xe implant infl Re-Cr crevice, (10) 550

INTERGRANULAR CRACKING
crack optic anal during strain tests, (3) 120, (5) 219, (7) 343
flow veloc vs SCC 304 in Na_2SO_4, (9) 474
H_2SO_4, O_2, H, 289 C H_2O SCC AISI 304, (10) 518
rapid ID intergran or IGSCC Alloy 600, (12) 640
SCC AISI 302 in SSRT, (9) 493

INTERGRANULAR, LOCAL EFFECTS
compos infl sensit 304 steel, (2) 51, (12) 669
cutting, grinding infl 304 sensit, (9) 445
Disc- contin cooling sensit 304 SS, (12) 669
etch test for ferritic steels ig at a, (4) 163

In 600 heat treat vs low temp SCC, (6) 281
metallurg aspects 304 sensit, (1) 21
rapid ID intergran or IGSCC Alloy 600, (12) 640

Internal surfaces CP: CP inside pipe related to time, (11) 604

ION
calcar deposits due to CP, (11) 609
crack sol analys in SCC AA7075, (4) 195
local effects finite elem model, (10) 540
P ion implant effects C steel, (6) 307
passive film breakdown on Fe, (9) 465
passivity ferritic SS in Cl^- sol, (10) 545

Iridium: Pt alloy effects on pure Cr, (3) 134

IRON MATERIALS OF CONSTRUCTION
Cu infl on H, corros steels vs H_2S, (9) 471
Fe + or 1 Al, Si in 25 C H_2SO_4, (4) 190
formic acid vs Fe, Ni, Cr, 304 SS, (3) 95
oxidat Fe-Al with Cr, Ni, or Mn, (4) 152
passive film breakdown on Fe, (9) 465
pit Fe infl by Mo, Cr, W salts, (2) 47
repass kinetics, scratches on Fe, (3) 110

Iron sulfides: biogenic sulfide films + air vs steel, (12) 650
Iron oxides: review- Fe oxide dissol mech, (12) 663
Joining: cutting, grinding infl 304 sensit, (9) 445

L

LABORATORY TESTING
Al acous emis corros, (9) 459
anod films on Ni, Ni-Mo in Na_2SO_4, (2) 62
auto body rust layer character, (11) 606
biogenic sulfide films + air vs steel, (12) 650
Cl^- infl oxide films on Nb, (3) 116
coating disbond by hi pH H_2O film, (1) 5
crack growth, SCC aust SS, (9) 487
Cu infl H, corros steels vs H_2S, (9) 471
Disc-contin cooling sensit 304 SS, (12) 669
Disc-veloc effects SCC, 304 SS, (1) 36
etch test for ferritic steels ig at a, (4) 163
galvanic rate, distrib predict, (12) 628
H embrit PH steels, infl surf cond, (4) 146
inhib H_2SO_4 attack 63-37 brass, (1) 33
Ni-Co-Cr-Mo amorph alloy vs H_2SO_4, (2) 73
pipeline steels vs wet natural gas, H_2S, (9) 478
pit Fe infl by Mo, Cr, W salts, (2) 47
pit suscep low alloy turbine disk, (8) 409
potentiodyn test for 304 sensit, (8) 393, (10) 560
rep. :ss kinetics, scratches on Fe, (3) 110
SCC AISI 302 in SSRT, (9) 493
SCC aust SS vs compres stress, (6) 302
steel inhib by molyb ions, (6) 296
thiosulfate attack on aus SS, (12) 633
Ti alloy vs HCl, (1) 14
wt loss eval vs activa delay, (6) 322

Laminated, scaling: duplex Cr-Ni steels vs H_2S-Cl 177 C sol, (8) 431
Lattice: Pt alloy effects on pure Cr, (3) 134
Lithium: Cu vs H_2O+LiCl at 4 pH potential tests, (8) 420

LOCALIZED MATERIALS EFFECTS
local effects finite elem model, (10) 540
Xe implant infl Re-Cr crevice, (10) 550

M

Magnesium: crystallog pure Mg SCC, (1) 39
Magnesium carbonate: calcar depos due to CP, (11) 609

MAGNESIUM CHLORIDE
crack growth, SCC aust SS, (9) 487
SCC aust SS vs compres stress, (6) 302

Magnetite, oxidation: review- Fe oxide dissol mech, (12) 663

MANGANESE
AISI 304 microalloy vs sensit, (8) 441, (12) 643
microstruc SSCC Fe tubes, (2) 77, (10) 517
oxida Fe-Al with Cr, Ni, or Mn, (4) 152
pipeline steels vs wet natural gas, H_2S, (9) 478

Materials, accel lab test: disc-veloc effects SCC, 304 SS, (1) 36

METAL ARC WELDING
etch test ferritic steels ig at a, (4) 163
metallurg aspects 304 sensit, (1) 21
pit resist AISI 316 GTA welds, (11) 569
Ti cathod polar in NaCl sol vs Cl^-, (6) 266

Metal coatings: Xe implant infl on Re-Cr crevice, (10) 550

METAL PIPES
Alloy 600 U-bend SCC in 290 C hi pur H_2O, (8) 425
C steel vs Cl^-, fluorides, (4) 186
CP inside pipe related to time, (11) 604
microstruc SSCC Fe tubes, (2) 77, (10) 517
pipeline steels vs wet natural gas, H_2S, (9) 478

Metal structure: metallurg aspects 304 sensit, (1) 21
Metallic embrittlement: pipeline steels vs wet natural gas, H_2S, (9) 478
Methyl alcohols: pit Zr4 in meth sol with Cl^-, (10) 561

MICROSTRUCTURE, METALS
Disc-SSC low alloy steel pipes, (10) 517
microstruc SSCC Fe tubes, (2) 77, (10) 517
pipeline steels vs wet natural gas, H_2S, (9) 478

Molybdate inhibitors: steel inhib by molyb ions, (6) 296

MOLYBDENUM
AISI 304 microalloy vs sensit, (8) 441, (12) 643
anod films on Ni, Ni-Mo in Na_2SO_4, (2) 62
Mo segreg in Ni-Nc alloy pit, (3) 105
Ni-Co-Cr-Mo amorph alloy vs H_2SO_4, (2) 73
passivity ferritic SS in Cl^- sol, (10) 545
pit Fe infl by Mo, Cr, W salts, (2) 47
pit resist AISI 316 GTA welds, (11) 569

MORPHOLOGY, SCALE
anod films single phase Ni-Mo, (12) 655
C steel vs Cl^-, fluorides, (4) 186
review- Fe oxide dissol mech, (12) 663

N

NACE STANDARDS
microstruc SSCC Fe tubes, (2) 77, (10) 517
pipeline steels vs wet natural gas, H_2S, (9) 478

Naphthenic acids: In 600 heat treat vs low temp SCC, (6) 281
Natural gases: pipeline steels vs wet natural gas, H_2S, (9) 478
Neon: P ion implant effects C steel, (6) 307

NICKEL
anod films Ni, Ni-Mo in Na_2SO_4, (2) 62
anod polar Ni-Fe, Ni-Cr-Fe + P, B, (11) 619

C steel vs Cl^- fluorides, (4) 186
Co, Ni vs H_2SO_4 + propargyl alcohol, (8) 418
formic acid vs Fe, Ni, Cr, 304 SS, (3) 95
Ni-Co-Cr-Mo amorph alloy vs H_2SO_4, (2) 73
oxida Fe-Al with Cr, Ni or Mn, (4) 152

Nickel 200-270: Ni 270 vs P-containing sol, (10) 528
Nickel-chromium-iron alloys: anod polar Ni-Fe, Ni-Cr-Fe + P, B, (11) 619

NICKEL-MOLYBDENUM
anod films single phase Ni-Mo, (12) 655
Mo segreg in Ni-Nc alloy pit, (3) 105

NITRIDING
Disc-contin cooling sensit 304 SS, (12) 669
microstruc SSCC Fe tubes, (2) 77, (10) 517

Nitrogen: compos infl sensit 304 steel, (2) 51, (12) 669
Nitrogen embrittlement: SCC brass in ammonia, no anod attack, (8) 439
Nitrogenous compounds: urea hi temp, pres vs hi Cr, low Ni steel, (8) 387
Nondestructive testing: potentiodyn test 304 sensit, (8) 393, (10) 560

NUCLEAR REACTORS
H_2SO_4, O_2, H, 289 C H_2O SCC AISI 304, (10) 518
metallurg aspects 304 sensit, (1) 21

O

Oils, mineral: coating disbond by hi pH H_2O, (1) 5
On-site, pilot plant test: potentiodyn test 304 sensit, (8) 393, (10) 560

Optical instrument test: auto body rust layer character, (11) 606

OPTICAL NONDESTRUCTIVE TEST
disc-veloc effects SCC C, 304 SS, (1) 36
304 grain attack due to sand P doping, (11) 598
Organic coatings: coating disbond by hi pH H_2O film, (1) 5

Organic inhibitors: CP Al in acids, (2) 88
Orientation of surfaces: auto body rust layer character, (11) 606
Orientation, grain: H induced crack smooth torsional, (4) 197
Osmosis: coating disbond by hi pH H_2O film, (1) 5

OXALIC ACID
cutting, grinding infl 304 sensit, (9) 445
elec charge test 304 sensit, (11) 584

OXIDATION
C steel vs Cl^-, fluorides, (4) 186
Cu vs H_2O+LiCl at 4 pH potential tests, (8) 420
magnetite dissol in chelants, (4) 176
Ni 270 vs P-containing sol, (10) 528
oxida Fe-Al with Cr, Ni, or Mn, (4) 152
P ion implant effects C steel, (6) 307
pit Zr4 in methanol sol with Cl^-, (10) 561
steel inhib by molyb ions, (6) 296

OXIDES
anod films Ni, Ni-Mo in Na_2SO_4, (2) 62
Cl^- infl oxide films on Nb, (3) 116
microstruc SSCC Fe tubes, (2) 77, (10) 517
repass kinetics, scratches on Fe, (3) 110

OXYGEN
Al pit vs open circuit cond, (10) 534
biogenic sulfide films + air vs steel, (12) 650
CP inside pipe related to time, (11) 604
CP Zr in oxidiz HCl sol, (6) 289
chlorine dioxide vs 316L SS, (1) 1
crevice attack AISI 304, 316 in seaw, (6) 313, (7) 343
Cu vs Cl^-, infl oxygen, (2) 82
H_2SO_4, O_2, H, 289 C H_2O SCC AISI 304, (10) 518
metallurg aspects 304 sensit, (1) 21
oxida Fe-Al with Cr, Ni, or Mn, (4) 152
pit suscep low alloy turbine disk, (8) 409
recurrent H_2O condens effects, (10) 511
urea hi temp, pres vs hi Cr, low Ni steel, (8) 387

P

Palladium: Pt alloy effects pure Cr, (3) 134
Paper industry: chlorine dioxide vs 316L SS, (1) 1

PASSIVATION
AC corros Al in HCl, (12) 644
amorph Fe-Ni-Cr-W alloys vs Cl^-, (6) 272
anod films single phase Ni-Mo, (12) 655
anod polar Ni-Fe, Ni-Cr-Fe + P, B, (11) 619
crevice attack AISI 304, 316 in seaw, (6) 313, (7) 343
Cu infl H, corros steels vs H_2S, (9) 471
Fe + or 1 Al, Si in 25 C H_2SO_4, (4) 190
Ni-Co-Cr-Mo amorph alloy vs H_2SO_4, (2) 73
Ni 270 vs P-containing sol, (10) 528
P ion implant effects C steel, (6) 307
passive film breakdown on Fe, (9) 465
passivity ferritic SS in Cl^- sol, (10) 545
passivity Fe in NaOH, Na_2SiO_3 sol, (11) 595
pit Cr steels in H_2SO_4, Cl^-, (4) 140
pit Zr4 in methanol sol with Cl^-, (10) 561
Pt alloy effects pure Cr, (3) 134
repass kinetics, scratches on Fe, (3) 110
steel inhib by molyb ions, (6) 296
urea hi temp, pres vs hi Cr, low Ni steel, (8) 387

Permeation: C steel vs Cl^-, fluorides, (4) 186

pH CHANGES
amorph Fe-Ni-Cr-W alloys vs Cl^-, (6) 272
anod films single phase Ni-Mo, (12) 655
anod polar Ni-Fe, Ni-Cr-Fe + P, B, (11) 619
calcar depos due to CP, (11) 609
chlorine dioxide vs 316L SS, (1) 1
crack sol analys in SCC AA7075, (4) 195
crevice attack AISI 304, 316 in seaw, (6) 313, (7) 343
Cu infl H, corros steels vs H_2S, (9) 471
Cu vs Cl^-, infl oxygen, (2) 82
H_2SO_4, O_2, H, 289 C H_2O SCC AISI 304, (10) 518
Ni 270 vs P-containing sol, (10) 528
pit mild steel in basic Na_2S sol, (8) 414
pit zirconium - review, (1) 9
thiosulfate attack on aust SS, (12) 633

pH control: crack growth, SCC aust SS, (9) 487

pH, LESS THAN 6
anod films Ni, Ni-Mo in Na_2SO_4, (2) 62
C steel vs Cl^-, fluorides, (4) 186
Cu vs H_2O+LiCl at 4 pH potential tests, (8) 420
SSRT vs brass, (3) 101
steel inhib by molyb ions, (6) 296

pH, MORE THAN 6
coating disbond by hi pH H_2O film, (1) 5
P ion implant effects on C steel, (6) 307
steel inhib by molyb ions, (6) 296

PHASE, METAL STRUCTURE
duplex Cr-Ni steels vs H_2S-Cl 177 C sol, (8) 431
pit resist AISI 316 GTA welds, (11) 569

PHOSPHATES
Ni 270 vs P-containing sol, (10) 528
passive film breakdown on Fe, (9) 465

PHOSPHORUS, CONSTRUCTION
Disc-contin cooling sensit 304 SS, (12) 669
P ion implant effects C steel, (6) 307
pit resist AISI 316 GTA welds, (11) 569
304 grain attack due to sand P doping, (11) 598

Photographic, data: rapid ID intergran or IGSCC Alloy 600, (12) 640

PIPELINE TRANSPORTATION
Cu infl H, corros steels vs H_2S, (9) 471
pipeline steels vs wet natural gas, H_2S, (9) 478

PITTING
AC corros Al in HCl, (12) 644
Al acous emis corros, (9) 459
amorph Fe-Ni-Cr-W alloys vs, (6) 272
auto body rust layer character, (11) 606
biogenic sulfide films + air vs steel, (12) 650
C steel vs Cl^-, fluorides, (4) 186
CP Zr in oxidiz HCl sol, (6) 289
Mo segreg in Ni-Nc alloy pit, (3) 105
Ni-Co-Cr-Mo amorph alloy vs H_2SO_4, (2) 73
passive film breakdown on Fe, (9) 465
passivity ferritic SS in Cl^- sol, (10) 545
pit induction time significance, (10) 559
pit Cr steels in H_2SO_4, Cl^-, (4) 140
pit Fe infl by Mo, Cr, W salts, (2) 47
pit mild steel in basic Na_2S sol, (8) 414
pit zirconium - review, (1) 9
pit resist AISI 316 GTA welds, (11) 569
pit suscep low alloy turbine disk, (8) 409
pit Zr4 in methanol sol with Cl^-, (10) 561
potentiodyn test 304 sensit, (8) 393, (10) 560
SCC aust SS vs compres stress, (6) 302

Pitting, initiation: pit Cr steels in H_2SO_4, Cl^-, (4) 140
Platinum: Pt alloy effects pure Cr, (3) 134

POLARIZATION RATE METERS
amorph Fe-Ni-Cr-W alloys vs Cl^-, (6) 272
Cl^- infl oxide films on Nb, (3) 116
chlorine dioxide vs 316L SS, (1) 1
Disc-galvanostat polar resist measure, (11) 593
In 600 heat treat vs low temp SCC, (6) 281
inhib H_2SO_4 attack 63-37 brass, (1) 33
Fe + or 1 Al, Si in 25 C H_2SO_4, (4) 190
Mo segreg in Ni-Nc alloy pit, (3) 105
Ni-Co-Cr-Mo amorph alloy vs H_2SO_4, (2) 73
P ion implant effects C steel, (6) 307
Ti alloy vs HCl, (1) 14

POLARIZATION
anod polar Ni-Fe, Ni-Cr-Fe + P, B, (11) 619
duplex Cr-Ni steels vs H_2S-Cl 177 C sol, (8) 431
galvanic rate, distrib predict, (12) 628
local effects finite elem model, (10) 540
passivity Fe in NaOH, Na_2SiO_3 sol, (11) 595
potentials vs fatigue 304 vs 250 C, Na_2SO_4, (11) 573
urea hi temp, pres vs hi Cr, low Ni steel, (8) 387

POTASSIUM
crystallog pure Mg SCC, (1) 39
formic acid vs Fe, Ni, Cr, 304 SS, (3) 95

POTENTIALS, LAB TESTING
AC corros Al in HCl, (12) 644
CP inside pipe related to time, (11) 604
Co, Ni vs H_2SO_4 + propargyl alcohol, (8) 418
Cu vs Cl^-, infl oxygen, (2) 82
elec charge test for 304 sensit, (11) 584
local effects finite elem model, (10) 540
passive film breakdown on Fe, (9) 465
pit induction time significance, (10) 559
pit Cr steels in H_2SO_4, Cl^-, (4) 140
pit resist AISI 316 GTA welds, (11) 569
potentials vs fatigue 304 vs 250 C Na_2SO_4, (11) 573
repass kinetics, scratches on Fe, (3) 110
thiosulfate attack on aust SS, (12) 633

Potentials, underground test: calcar deposits due to CP, (11) 609

POTENTIOMETERS
abrasion steel in 1% NaCl, (2) 60
AC corros Al in HCl, (12) 644
anod polar Ni-Fe, Ni-Cr-Fe + P, B, (11) 619
Cu infl on H, corros steels vs H_2S, (9) 471
Cu vs H_2O+LiCl at 4 pH potential tests, (8) 420
Disc-galvanostat polar resist measure, (11) 593
flow veloc vs SCC 304 in Na_2SO_4, (9) 474
formic acid vs Fe, Ni, Cr, 304 SS, (3) 95
galvanic rate, distrib predict, (12) 628
Fe + or 1 Al, Si in 25 C H_2SO_4, (4) 190
Ni-Co-Cr-Mo amorph alloy vs H_2SO_4, (2) 73
Ni 270 vs P-contain sol, (10) 528
passive film breakdown on Fe, (9) 465
passivity ferritic SS in Cl^- sol, (10) 545
pit induction time significance, (10) 559
pit Fe infl by Mo, Cr, W salts, (2) 47
pit mild steel in basic Na_2S sol, (8) 414
pit zirconium - review, (1) 9
pit Zr4 in methanol sol with Cl^-, (10) 561
potentiodyn test 304 sensit, (8) 393, (10) 560
Pt alloy effects pure Cr, (3) 134
steel inhib by molyb ions, (6) 296
Ti CP in NaCl sol vs Cl^-, (6) 266
urea hi temp, pres vs hi Cr, low Ni steel, (8) 387

Precip. hardening steels: H embrit of PH steels, infl surf condi, (4) 146
Precipitation effects: local effects finite elem model, (10) 540

PREDICTIVE CALCULATIONS
Alloy 600 U-bend SCC in 290 C hi pur H_2O, (8) 425
galvanic rate, distrib predict, (12) 628
local effects finite elem model, (10) 540
wt loss eval vs activa delay, (6) 322

PRESSURE
calcar depos due to CP, (11) 609
pipeline steels vs wet natural gas, H_2S, (9) 478

Pressure: urea hi temp, pres vs hi Cr, low Ni steel, (8) 387

R

RATE OR ZONE CALCULATIONS
abrasion steel in 1% NaCl, (2) 60
AISI 304 microalloy vs sensit, (8) 441, (12) 643
Al pit vs open circuit cond, (10) 534
Al-Zn-Mg suscep SCC by SSR, (10) 552
biogenic sulfide films + air vs steel, (12) 650
Co, Ni vs H_2SO_4 + propargyl alcohol, (8) 418
compos infl sensit 304 steel, (2) 51, (12) 669
crack optic anal during strain tests, (3) 120, (5) 219, (7) 343

Cu vs Cl^-, infl oxygen, (2) 82
formic acid vs Fe, Ni, Cr, 304 SS, (3) 95
galvanic rate, distrib predict, (12) 628
magnetite dissol in chelants, (4) 176
Ni 270 vs P-contain sol, (10) 528
pit Cr steels in H_2SO_4, Cl^-, (4) 140
pit suscep low alloy turbine disk, (8) 409
potentials vs fatigue 304 vs 250 C Na_2SO_4, (11) 573
relative humid infl vs hi str, C steel, (10) 507
thiosulfate attack on aust SS, (12) 633
Ti cathod polar in NaCl sol vs Cl^-, (6) 266
Ti alloy vs HCl, (1) 14
tropic atmosph vs C steel, (4) 170
urea hi temp, pres vs hi Cr, low Ni steel, (8) 387
wt loss eval vs activa delay, (6) 322
304 grain attack due to sand P doping, (11) 598

RATE, PITTING
Al pit vs open circuit cond, (10) 534
Cu infl H, corros steels vs H_2S, (9) 471
passivity ferritic SS in Cl^- sol, (10) 545
pit Zr4 in methanol sol with Cl^-, (10) 561
recurrent H_2O condens effects, (10) 511

Research projects: Epelboin biograph, biblio, (3) 93

RESIDUAL STRESSES
cutting, grinding infl 304 sensit, (9) 445
metallurg aspects 304 sensit, (1) 21
SCC aust SS vs compres stress, (6) 302

RESISTANCE, NDT
biogenic sulfide films + air vs steel, (12) 650
Disc-galvanostat polar resist measure, (11) 593

RESISTIVITY
Al pit vs open circuit cond, (10) 534
galvanic rate, distrib predict, (12) 628
H_2SO_4, O_2, H, 289 C H_2O SCC AISI 304, (10) 518
local effects finite elem model, (10) 540

REVIEWS
calcar depos due to CP, (11) 609
pit zirconium - review, (1) 9
Fe oxide dissol mech, (12) 663

Rubidium: Pt alloy effects on pure Cr, (3) 134

S

Safety: urea hi temp, pres vs hi Cr, low Ni steel, (8) 387

Samples, methods: urea hi temp, pres vs hi Cr, low Ni steel, (8) 387

SEA, AQUEOUS
calcar depos due to CP, (11) 609
CP inside pipe related to time, (11) 604
crevice attack AISI 304, 316 in seaw, (6) 313, (7) 343
flow veloc infl on CP cylinder, (3) 127

SEGREGATION, GRAIN
AISI 304 microalloy vs sensit, (8) 441, (12) 643
composit infl sensit 304 steel, (2) 51, (12) 669
cutting, grinding infl 304 sensit, (9) 445
elec charge test for 304 sensit, (11) 584
flow veloc vs SCC 304 in Na_2SO_4, (9) 474
H_2SO_4, O_2, H, 289 C H_2O SCC AISI 304, (10) 518
In 600 heat treat vs low temp SCC, (6) 281
metallurg aspects 304 sensit, (1) 21
microstruc SSCC Fe tubes, (2) 77, (10) 517
Mo segreg in Ni-Nc alloy pit, (3) 105
pipeline steels vs wet natural gas, H_2S, (9) 478
pit resist AISI 316 GTA welds, (11) 569
potentials vs fatigue 304 vs 250 C Na_2SO_4, (11) 573
potentiodyn test for 304 sensit, (8) 393
SCC AISI 302 in SSRT, (9) 493
304 grain attack due to sand P doping, (11) 598

Self-corrosion, galvanic: galvanic rate, distrib predict, (12) 628

SENSITIZATION
crack optic anal during strain tests, (3) 120, (5) 219, (7) 343
Disc-contin cooling sensit 304 SS, (12) 669
Disc-veloc effects SCC C, 304 SS, (1) 36
rapid ID intergran or IGSCC Alloy 600, (12) 640

Shielded metal arc welding: pit resist AISI 316 GTA welds, (11) 569
Silicates: passivity Fe in NaOH, Na_2SiO_3 sol, (11) 595

SILICON
auto body rust layer character, (11) 606
Fe + or 1 Al, Si in 25 C H_2SO_4, (4) 190
microstruc SSCC Fe tubes, (2) 77, (10) 517

Slip planes: cutting, grinding infl 304 sensit, (9) 445

SODIUM
anod films Ni, Ni-Mo in Na_2SO_4, (2) 62
anod films single phase Ni-Mo, (12) 655
auto body rust layer character, (11) 606
crack sol analys in SCC AA7075, (4) 195
flow veloc vs SCC 304 in Na_2SO_4, (9) 474
In 600 heat treat vs low temp SCC, (6) 281
Mo segreg in Ni-Nc alloy pit, (3) 105
passivity Fe in NaOH, Na_2SiO_3 sol, (11) 595
pit mild steel in basic Na_2S sol, (8) 414
potentials vs fatigue 304 vs 250 C, Na_2SO_4, (11) 573
thiosulfate attack on aust SS, (12) 633

SODIUM CHLORIDE
Al acous emis corros, (9) 459
crack sol analys in SCC AA7075, (4) 195
crystallog pure Mg SCC, (1) 39
Cu infl on H, corros steels vs H_2S, (9) 471
Cu vs Cl^- infl of oxygen, (2) 82
duplex Cr-Ni steels vs H_2S-Cl 177 C sol, (8) 431
P ion implant effects C steel, (6) 307
passive film breakdown on Fe, (9) 465
pit Zr4 in methanol sol with Cl^-, (10) 561
Ti cathod polar in NaCl sol vs Cl^-, (6) 266

SODIUM HYDROXIDE
Al acous emis corros, (9) 459
passivity Fe in NaOH, Na_2SiO_3 sol, (11) 595

Sodium hypochlorite: Ti cathod polar in NaCl sol vs Cl^-, (6) 266

Solvent surface prep: magnetite dissol in chelants, (4) 176
Sputtering application: amorph Fe-Ni-Cr-W alloy vs Cl^-, (6) 272

STEAM
Ni 270 vs P-containing sol, (10) 528
pit suscep low alloy turbine disk, (8) 409

STEELS
amorph Fe-Ni-Cr-W alloys vs Cl^-, (6) 272
anod polar Ni-Fe, Ni-Cr-Fe + P, B, (11) 619

Steels, carbon: Disc-veloc effects SCC, 304 SS, (1) 36
Steels, carbon wrought + Mo: microstruc SSCC Fe tubes, (2) 77, (10) 517

STEELS, CARBON WROUGHT ALLOYED
Disc-SSC low alloy steel pipes, (10) 517
microstruc SSCC Fe tubes, (2) 77, (10) 517
relative humid infl vs hi str, C steel, (10) 507

STEELS, CARBON, WROUGHT, HI STRENGTH
Cu infl on H, corros steels vs H_2S, (9) 471
H induced crack smooth torsional, (4) 197
microstruc SSCC Fe tubes, (2) 77, (10) 517
pipeline steels vs wet natural gas, H_2S, (9) 478
relative humid infl vs hi str, C steel, (10) 507

STEELS, CHROMIUM FERRITIC
etch test ferritic steels ig at a, (4) 163
passivity ferritic SS in Cl^- sol, (10) 545
Xe implant infl Re-Cr crevice, (10) 550

STEELS, CHROMIUM-NICKEL, 304, 304L
AISI 304 microalloy vs sensit, (8) 441
amorph Fe-Ni-Cr-W alloys vs Cl^-, (6) 272
composit infl sensit 304 SS, (2) 51, (12) 669
crack optic anal during strain tests, (3) 120, (5) 219, (7) 343
crevice attack AISI 304, 316 in seaw, (6) 313, (7) 343
cutting, grinding infl 304 sensit, (9) 445
Disc-contin cooling sensit 304 SS, (12) 669
Disc-veloc effects SCC, 304 SS, (1) 36
elec charge test for 304 sensit, (11) 584
etch test ferritic steels ig at a, (4) 163
flow veloc vs SCC 304 in Na_2SO_4, (9) 474
H_2SO_4, O_2, H, 289 C H_2O SCC AISI 304, (10) 518
metallurg aspects 304 sensit, (1) 21
potentials vs fatigue 304 vs 250 C Na_2SO_4, (11) 573
potentiodyn test 304 sensit, (8) 393, (10) 560
SCC AISI 302 in SSRT, (9) 493
SCC aust SS vs compres stress, (6) 302
thiosulfate attack on aust SS, (12) 633
304 grain attack due to sand P doping, (11) 598

Steels, chromium-nickel, 310, 310S: crack growth, SCC aust SS, (9) 487

STEELS, CHROMIUM-NICKEL, 316, 316L
chlorine dioxide vs 316L SS, (1) 1
crevice attack AISI 304, 316 in seaw, (6) 313, (7) 343
etch test for ferritic steels ig at a, (4) 163
pit resist AISI 316 GTA welds, (11) 569
thiosulfate attack on aust SS, (12) 633
urea hi temp, pres vs hi Cr, low Ni steel, (8) 387

STEELS, CHROMIUM-NICKEL, 321, 347, 348
crack growth, SCC aust SS, (9) 487
SCC aust SS vs compres stress, (6) 302

Steels, chromium-nickel, aust: urea hi temp, pres vs hi Cr, low Ni steel, (8) 387

STEELS, CHROMIUM, FERRITIC, Cr-Mo
pit suscep low alloy turbine disk, (8) 409
urea hi temp, pres vs hi Cr, low Ni steel, (8) 387

Steels, chromium, ferritic, 26Cr-1Mo: pit suscep low alloy turbine disk, (8) 409

Steels, chromium, marten: pit Cr steels in H_2SO_4, Cl^-, (4) 140

Steels, Cr-Ni-Fe, PH, + Al, Cu, Ti: thiosulfate attack on aust SS, (12) 633
Steels, ferritic-aust: duplex Cr-Ni steels vs H_2S-Cl 177 C sol, (8) 431

STEELS, Ni-Cr, INCONEL 600
Alloy 600 U-bend SCC in 290 C hi pur H_2O, (8) 425
In 600 heat treat vs low temp SCC, (6) 281
rapid ID intergran or IGSCC Alloy 600, (12) 640

STEELS, OTHER
SCC aust SS vs compres stress, (6) 302
thiosulfate attack on aust SS, (12) 633

Strain: H embrit PH steels, infl surf cond, (4) 146
Strauss test: 304 grain attack due to sand P doping, (11) 598

STRESS CORROSION CRACKING
Al acous emis corros, (9) 459
Al-Zn-mg suscep SCC by SSR, (10) 552
Alloy 600 U-bend SCC in 290 C hi pur H_2O, (8) 425
CP Zr in oxidiz HCl sol, (6) 289
crack optic anal during strain tests, (3) 120, (5) 219, (7) 343
crystallog pure Mg SCC, (1) 39
Disc-SSC low alloy steel pipes, (10) 517
Disc-veloc effects SCC, 304 SS, (1) 36
duplex Cr-Ni steels vs H_2S-Cl 177 C sol, (8) 431
flow veloc vs SCC 304 in Na_2SO_4, (9) 474
H_2SO_4, O_2, H, 289 C H_2O SCC AISI 304, (10) 518
In 600 heat treat vs low temp SCC, (6) 281
microstruc SSCC Fe tubes, (2) 77, (10) 517
pipeline steels vs wet natural gas, H_2S, (9) 478
SCC AISI 302 in SSRT, (9) 493
SCC aust SS vs compres stress, '6) 302
SCC brass in ammonia, no anod attack, (8) 439
SSRT vs brass, (3) 101

Stress relieving: elec charge test for 304 sensit, (11) 584

STRESS, ACCEL LAB TEST
Al-Zn-Mg suscep SCC by SSR, (10) 552
Alloy 600 U-bend SCC in 290 C hi pur H_2O, (8) 425
CP Zr in oxidiz HCl sol, (6) 289
crack growth, SCC aust SS, (9) 487
crack optic anal during strain tests, (3) 120, (5) 219, (7) 343
duplex Cr-Ni steels vs H_2S-Cl 177 C sol, (8) 431
flow veloc vs SCC 304 in Na_2SO_4, (9) 474
H_2SO_4, O_2, H, 289 C H_2O SCC AISI 304, (10) 518
In 600 heat treat vs low temp SCC, (6) 281
SCC AISI 302 in SSRT, (9) 493
SSRT vs brass, (3) 101

STRESSES
cutting, grinding infl 304 sensit, (9) 445
Disc-contin cooling sensit 304 SS, (12) 669
flow veloc vs SCC 304 in Na_2SO_4, (9) 474

Strontium: calcar depos due to CP, (11) 609

SULFATES
anod films Ni, Ni-Mo in Na_2SO_4, (2) 62
anod films single phase Ni-Mo, (12) 655
crack sol analys in SCC AA7075, (4) 195
flow veloc vs SCC 304 in Na_2SO_4, (9) 474
In 600 heat treat vs low temp SCC, (6) 281
Mo segreg in Ni-Nc alloy pit, (3) 105
potentials vs fatigue 304 vs 250 C Na_2SO_4, (11) 573
SSRT vs brass, (3) 101
thiosulfate attack on aust SS, (12) 633

SULFIDES
biogenic sulfide films + air vs steel, (12) 650
Cu infl H, corros steels vs H_2S, (9) 471
microstruc SSCC Fe tubes, (2) 77, (12) 669
pit mild steel in basic Na_2S sol, (8) 414
pit resist AISI 316 GTA welds, (11) 569
thiosulfate attack on aust SS, (12) 633

SULFUR
disc-contin cooling sensit 304 SS, (12) 669
In 600 heat treat vs low temp SCC, (6) 281
microstruc SSCC Fe tubes, (2) 77, (12) 669
pipeline steels vs wet natural gas, H_2S, (9) 478
pit resist 316 GTA welds, (11) 569
304 grain attack due to sand P doping, (11) 598

Sulfur dioxide: tropic atmosph vs C steel, (4) 170

SULFURIC ACIDS
Co, Ni vs H_2SO_4 + propargyl alcohol, (8) 418
H_2SO_4, O_2, H, 289 C H_2O SCC AISI 304, (10) 518
inhib H_2SO_4 attack 63-37 brass, (1) 33
Fe + or 1 Al, Si in 25 C H_2SO_4, (4) 190
Ni-Co-Cr-Mo amorph alloy vs H_2SO_4, (2) 73
Ti cathod polar in NaCl sol vs Cl^-, (6) 266

Superalloys: urea hi temp, pres vs hi Cr, low Ni steel, (8) 387

SURFACE PREPARATION
CP Zr in oxidiz HCl sol, (6) 289
elec charge test for 304 sensit, (11) 584
H induced crack smooth torsional, (4) 197
pit suscep low alloy turbine disk, (8) 409

T

TEMPERATURE (0 TO 22 C)
crystallog pure Mg SCC, (1) 39
Ni 270 vs P-containing sol, (10) 528
thiosulfate attack on aust SS, (12) 633

TEMPERATURE (22 TO 100 C)
crevice attack AISI 304, 316 in seaw, (6) 313, (7) 343
Cu vs H_2O+LiCl at 4 pH potential tests, (8) 420
Ni 270 vs P-containing sol, (10) 528
passivity ferritic SS in Cl^- sol, (10) 545
pit zirconium - review, (1) 9
recurrent H_2S condens effects, (10) 511
thiosulfate attack on aust SS, (12) 633
Ti cathod polar in NaCl sol vs Cl^-, (6) 266

TEMPERATURE (100 TO 200 C)
C steel vs Cl^-, fluorides, (4) 186
SCC aust SS vs compres stress, (6) 302
urea hi temp, pres vs hi Cr, low Ni steel, (8) 387

TEMPERATURE (200 TO 300 C)
Alloy 600 U-bend SCC in 290 C hi pur H_2O, (8) 425
cutting, grinding infl 304 sensit, (9) 445
flow veloc vs SCC 304 in Na_2SO_4, (9) 474
H_2SO_4, O_2, H, 289 C H_2O SCC AISI 304, (10) 518
oxida Fe-Al with Cr, Ni, or Mn, (4) 152
passivity ferritic SS in Cl^- sol, (10) 545
potentials vs fatigue 304 vs 250 C Na_2SO_4, (11) 573
urea hi temp, pres vs hi Cr, low Ni steel, (8) 387

Temperature (300 to 400 C): Alloy 600 U-bend SCC in 290 C hi pur H_2O, (8) 425
Temperature (400 to 500 C): cutting, grinding infl 304 sensit, (9) 445

Temperature (600 to 800 C): metallurg aspects 304 sensit, (1) 21

TEMPERATURE, CAUSES
AC corros Al in HCl, (12) 644
Al pit vs open circuit cond, (10) 534
CP Zr in oxidiz HCl sol, (6) 289
Disc-contin cooling sensit 304 SS, (12) 669
elec charge test 304 sensit, (11) 584
Ni 270 vs P-containing sol, (10) 528
passivity ferritic SS in Cl^- sol, (10) 545
potentiodyn test for 304 sensit, (8) 393
steel inhib by molyb ions, (6) 296

TENSILE STRESSES
crack growth, SCC aust SS, (9) 487
pit suscep low alloy turbine disk, (8) 409
SSRT vs brass, (3) 101

Thermodynamics: thiosulfate attack aust SS (12) 633

TIME
Al pit vs open circuit cond, (10) 534
calcar depos due to CP, (11) 609
CP inside pipe related to time, (11) 604
cutting, grinding infl 304 sensit, (9) 445
pit induction time significance, (10) 559
tropic atmosph vs C steel, (4) 170
wt loss eval vs activa delay, (6) 322

Time, testing: SCC aust SS vs compres stress, (6) 302

TITANIUM
microstruc SSCC Fe tubes, (2) 77, (10) 517
Ti cathod polar in NaCl sol vs Cl^-, (6) 266
Ti alloy vs HCl, (1) 14
wt loss eval vs activa delay, (6) 322

Torsional stresses: H induced crack smooth torsional, (4) 197
Toxins: P ion implant effects C steel, (6) 307

TRANSGRANULAR CRACKING
crystallog pure Mg SCC, (1) 39
SCC AISI 302 in SSRT, (9) 493
SCC brass in ammonia, no anod attack, (8) 439

Tropical atmospheric on-site test: tropic atmosph vs C steel, (4) 170
Tuberculation: biogenic sulfide films + air vs steel, (12) 650

TUNGSTEN
amorph Fe-Ni-Cr-W alloys vs Cl^-, (6) 272
pit Fe infl by Mo, Cr, W salts, (2) 47

U-Z

Underwater environments: pipeline steels vs wet natural gas, H_2S, (9) 478
Urea: urea hi temp, pres vs hi Cr, low Ni steel, (8) 387
Vanadium: AISI 304 microalloy vs sensit, (8) 441
Velocity lab test: galvanic rate, distrib predict, (12) 628

VELOCITY
Al pit vs open circuit cond, (10) 534
calcar depos due to CP, (11) 609

Cu vs Cl^-, infl oxygen, (2) 82
Disc-veloc effects SCC C, 304 SS, (1) 36
flow veloc infl CP cylinder, (3) 127
flow veloc vs SCC 304 in Na_2SO_4, (9) 474
galvanic rate, distrib predict, (12) 628
Ti cathod polar in NaCl sol vs Cl^-, (6) 266

VISIBLE LIGHT SPECTRA
crystallog pure Mg SCC, (1) 39
304 grain attack due to sand P doping, (11) 598

Voltmeters: AC corros Al in HCl, (12) 644

WEIGHT CHANGES
biogenic sulfide films + air vs steel, (12) 650
formic acid vs Fe, Ni, Cr, 304 SS, (3) 95
inhib H_2SO_4 attack 63-37 brass, (1) 33
tropic atmosph vs C steel, (4) 170
wt loss eval vs activa delay, (6) 322
304 grain attack due to sand P doping, (11) 598

X-RAY NONDESTRUCTIVE TESTING
anod films Ni, Ni-Mo in Na_2SO_4, (2) 62
anod films single phase Ni-Mo, (12) 655
thiosulfate attack aust SS, (12) 633

X-RAY INSTRUMENTATION TESTING
auto body rust layer character, (11) 606
C steel vs Cl^-, fluorides, (4) 186

Xenon gas: Xe implant infl Re-Cr crevice, (10) 550
Zircaloys: pit Zr4 in methanol sol with Cl^- (10) 561

ZIRCONIUM
CP Zr in oxidiz HCl sol, (6) 289
pit of zirconium - review, (1) 9

NEW!

CORROSION SOURCE BOOK

Edited by Seymour K. Coburn.

A collection of articles designed to inform engineers, metallurgists, and designers of the nature of corrosion and the means of prevention. The principles of corrosion technology are presented in the 80 illustrated and practical articles contained in this collection of technical papers published in ASM and NACE.

Beginning with eight visual forms of corrosion and discussions of the primary sources of corrosion, attention is given to protective coatings, corrosion of specific alloys, stress corrosion cracking, and special topics in corrosion engineering.

Sections include:
- Production Against Corrosion
- Specific Alloys
- Coatings
- Cracking
- Special Topics

420 Pages, indexed. Published by ASM & NACE in 1984.

Item #52500

$40.00 NACE Members $50.00 Nonmembers

Credit Cards accepted on phone orders. American Express, VISA, MASTERCARD®

Call: NACE Publications Order Dept. **(713) 492-0535**

On charge or credit cards orders we will figure these charges for you. Credit orders subject to credit approval.

Available from: NACE Publications Order Dept.
P.O. Box 218340
Houston, Texas 77218

Note: All orders from Texas must include 5% sales tax. All orders from outside the USA must include $3.00 for handling. All orders from Mexico and overseas must be prepaid. Proforma invoices will be sent for any orders which are not prepaid. Remittances from foreign countries must be by international money order or bank draft in USA funds. Shipping at any rate other than the most economical rate will be charged to the customer.

NACE-KEEPING YOU INFORMED....